Keokuk County, Iowa

and soil name	Pct. of map unit	manure and food processing was	_	Application of sewage sludg 	е	Disposal of wastewater by irrigation 	ı
	 	Rating class and limiting features 		Rating class and limiting features 			
8B: Judson	 95 	 Not limited 	 	 Not limited 	 	 Somewhat limited Too steep for surface application	 0.08
8C: Judson	 95 	 Not limited 	 	 Not limited 	 		 0.91 0.02
13B: Olmitz	30 	 Not limited 	 	 Not limited 	i 	 Somewhat limited Too steep for surface application	10.08
Vesser	 28 		 0.95 	•	0.95 	 Somewhat limited Depth to saturated zone Too steep for surface application	 0.95 0.08
Zook	27 27 	Depth to saturated zone Restricted permeability Flooding	11.00	Flooding	1.00 1.00	permeability	 1.00 1.00 0.60
24D2: Shelby	 95 	 Somewhat limited Slope 	 0.63 	 Somewhat limited Slope 	 0.63 	 Very limited Too steep for surface application	 1.00
	 	Restricted permeability	0.41 	Restricted permeability	0.31		0.77
		Too acid 	0.02	 Too acid 	0.07		0.31

Keokuk County, Iowa

Map symbol and soil name	Pct. of map unit	of manure and food- ap processing waste		Application of sewage sludg	е	Disposal of wastewater by irrigatior 	1
	 	Rating class and limiting features		Rating class and limiting features		Rating class and limiting features	
	 	 		 		 Too acid 	 0.07
24E2: Shelby	 90 	 Very limited Slope 	 1.00 	 Very limited Slope 	 1.00 	 Very limited Too steep for surface application	 1.00
	i I	Restricted permeability	0.41	Restricted permeability	0.31	· • •	11.00
		 Too acid 	0.02	Too acid 	0.07	· • •	0.31
51:		 		 		 	
Vesser	90 	Very limited Depth to saturated zone Flooding	 1.00 0.60	saturated zone		Very limited Depth to saturated zone Flooding	 1.00 0.60
51B:	1	_]] 	1
Vesser	95 	Somewhat limited Depth to saturated zone 	 0.95 	Somewhat limited Depth to saturated zone Flooding	 0.95 0.40 	saturated zone	0.95
54: Zook	1 90	 Very limited		 Very limited		 Very limited	1
200k	90	Depth to saturated zone Restricted permeability Flooding Leaching	1.00 1.00 1.00 0.60	Depth to saturated zone Flooding Restricted permeability	1.00 1.00 1.00	Depth to saturated zone Restricted permeability	1.00 1.00 0.60
		limitation 		 		 	
54+: Zook	 90 	 Very limited Depth to saturated zone Restricted permeability	1.00 1.00	saturated zone Flooding 	 1.00 1.00	saturated zone Restricted permeability	 1.00 1.00
		Flooding 	0.60 	Restricted permeability	1.00 	Flooding 	0.60

Keokuk County, Iowa

Map symbol and soil name	Pct. of map unit	manure and food- processing waste		Application of sewage sludg	е	Disposal of wastewater by irrigatior 	n
	i 	Rating class and limiting features		Rating class and limiting features		Rating class and limiting features	
	 	 Leaching limitation 	10.50	 		 	
56B: Cantril	 90 	_	 1.00 0.02	saturated zone	 1.00 0.07	saturated zone	 1.00 0.08
56C: Cantril	 90	•	 1.00	 - - Very limited Depth to	 1.00	Too acid Very limited Depth to	0.07 1.00
		saturated zone Too acid 	 0.02 	saturated zone Too acid 	 0.07 	saturated zone Too steep for surface application Too acid Too steep for sprinkler application	 0.91 0.07 0.02
65D2: Lindley	 95 		 0.63	 Somewhat limited Slope 	 0.63	surface	 1.00
		Restricted permeability	0.41	Too acid 	0.31	sprinkler	10.77
	 	 Too acid 	0.08	Restricted permeability	0.31	İ	0.31
	 	 	 	 	 	Restricted permeability 	0.31
65E: Lindley	 95 		 1.00 	 Very limited Slope 	 1.00 	 Very limited Too steep for surface application	 1.00
	 	Restricted permeability	0.41	Too acid	0.31		11.00
	 	 Too acid 	0.08	Restricted permeability	0.31	Too acid	0.31

Keokuk County, Iowa

Map symbol and soil name	Pct. of map unit	manure and food processing was	_	Application of sewage sludg	e	Disposal of wastewater by irrigatior 	1
	 	Rating class and limiting features 		Rating class and limiting features		Rating class and limiting features	Value
		 		 		Restricted permeability	0.31
65E2: Lindley	 90 	 Very limited Slope 	 1.00	 Very limited Slope 	11.00	surface	 1.00
	 	 Restricted permeability 	0.41	Too acid 	0.31	application Too steep for sprinkler application	11.00
	i I	Too acid 	0.08	Restricted permeability	0.31	Too acid 	0.31
	 	 	 	 	 	Restricted permeability 	0.31
65F: Lindley	90	 Very limited Slope 	1 1.00	 Very limited Slope 	11.00	surface	1 1.00
		Restricted permeability	0.41	Too acid	0.31	sprinkler	11.00
	 	 Too acid 	0.08	Restricted permeability	0.31	application Too acid 	0.31
	 	 	 	 	 	Restricted permeability 	0.31
65F2: Lindley	 90			 Very limited		 Very limited	
		Slope 	11.00	Slope 	11.00	Too steep for surface application	11.00
		Restricted permeability	0.41	Too acid	0.31	= =	11.00
	 	 Too acid 	0.08	Restricted permeability	0.31	= =	0.31
	 	 	 	 	 	Restricted permeability 	0.31
65G: Lindley	 95 	 Very limited Slope 	 1.00 	 Very limited Slope 	 1.00 	 Very limited Too steep for surface application	 1.00

Keokuk County, Iowa

Map symbol and soil name	Pct. of map unit	manure and food processing was	_	Application of sewage sludg 		Disposal of wastewater by irrigation 	ı
	 			Rating class and limiting features			
	 	 Restricted permeability	0.41	 Too acid 	0.31	 Too steep for sprinkler application	1.00
	 	 Too acid 	0.08	Restricted permeability	0.31	= =	0.31
74:	 	 	 	 	 	permeability	
Rubio	95 	 Very limited Depth to saturated zone Restricted	1.00 	 Very limited Depth to saturated zone Restricted	1.00 	 Very limited Depth to saturated zone Restricted	 1.00 1.00
	 	permeability Leaching limitation Too acid	İ	permeability Too acid	İ	Restricted permeability Too acid 	 0.07
75: Givin	 	 Very limited		 Very limited		 Very limited	
GIVIII	33	Depth to saturated zone Restricted	1.00 0.41	Depth to saturated zone Restricted permeability	1.00 0.31	Depth to saturated zone Restricted permeability	1.00
75B: Givin	 95 	Depth to saturated zone Restricted	1.00 0.41	 Very limited Depth to saturated zone Restricted permeability 	1.00 0.31		 1.00 0.31 0.08
76B: Ladoga	İ	Restricted	0.41		0.31		0.31
76B2: Ladoga	 - 90 	 Somewhat limited Restricted permeability	0.41	 Somewhat limited Restricted permeability	0.31	 Somewhat limited Restricted permeability	0.31

Keokuk County, Iowa

and soil name	Pct. of map unit	manure and food processing was	-	Application of sewage sludg	е	Disposal of wastewater by irrigation	L
	 	 Rating class and limiting features 		 Rating class and limiting features 		 Rating class and limiting features 	Value
	 	 	 	 	 	Too steep for surface application	0.08
76C: Ladoga	 95 	 Somewhat limited Restricted permeability - -	 0.41 	 Somewhat limited Restricted permeability 	 0.31 		 0.91 0.31 0.02
76C2: Ladoga	 90 	 Somewhat limited Restricted permeability 	0.41	 Somewhat limited Restricted permeability 	 0.31 	Somewhat limited Too steep for surface application Restricted permeability Too steep for sprinkler application	0.91
76D2: Ladoga	 90 	 Somewhat limited Slope 	 0.63	 Somewhat limited Slope 	 0.63	surface	11.00
	 	 Restricted permeability 	 0.41 	 Restricted permeability 	 0.31 	application Too steep for sprinkler application Restricted permeability	 0.77 0.31
80B: Clinton	 95 	permeability	0.41	 Somewhat limited Restricted permeability Too acid 	0.31 	 Somewhat limited Restricted permeability Too steep for surface application Too acid	 0.31 0.08 0.07
80C: Clinton	 95	 Somewhat limited	 	 Somewhat limited	 	 Somewhat limited	

Keokuk County, Iowa

Map symbol and soil name	Pct. of map unit	manure and food processing was	_	Application Of sewage sludg	е	Disposal of wastewater by irrigation 	า
	 	Rating class and limiting features		Rating class and limiting features		Rating class and limiting features	Value
		 Restricted permeability	0.41	 Restricted permeability	0.31	 Too steep for surface application	 0.91
	 	Too acid - - - - -	0.02	Too acid I I I I I I I I I I	0.07	Restricted permeability Too acid Too steep for sprinkler application	0.31 0.07 0.02
80C2: Clinton	 90 		 0.41 	 Somewhat limited Restricted permeability	 0.31 	 Somewhat limited Too steep for surface application	 0.91
	 	 Too acid 	 0.02 	Too acid - - - - -	0.07		0.31
80D: Clinton	 90 	 Somewhat limited Slope	 0.63	 Somewhat limited Slope	 0.63	 Very limited Too steep for surface	11.00
		 Restricted permeability	0.41	 Restricted permeability	0.31	application	0.77
	 	 Too acid 	0.02	 Too acid 	0.07	· • •	0.31
80D2: Clinton	 90 	 Somewhat limited Slope 	0.63	 Somewhat limited Slope 	0.63	surface	11.00
		 Restricted permeability	0.41	 Restricted permeability	0.31	application Too steep for sprinkler application	 0.77
	 	 Too acid 	0.02	Too acid 	0.07		0.31
87B: Colo	 68	 Very limited	 	 Very limited		 Very limited	

Keokuk County, Iowa

and soil name	Pct. of map unit	manure and food processing was	_	Application Of sewage sludg	е	Disposal of wastewater by irrigation	l
	 	Rating class and limiting features 		Rating class and limiting features		Rating class and limiting features	Value
	 	 Depth to saturated zone Flooding	 1.00 0.60	saturated zone	 1.00 1.00	saturated zone	 1.00 0.60
Zook	 32 	 Very limited Depth to saturated zone Restricted permeability Flooding Leaching	 1.00 1.00 0.60 	saturated zone Flooding	 1.00 1.00 1.00	 Very limited Depth to saturated zone Restricted permeability Flooding	 1.00 1.00 0.60
93D2: Shelby	 60 	limitation Somewhat limited Slope Restricted permeability Too acid	 	Restricted permeability	 	surface application Too steep for sprinkler application Restricted	 1.00 0.77
Adair		 		saturated zone	 1.00 1.00 1.063 	surface application Restricted permeability	 0.07 1.00 1.00 1.00 1.07
122: Sperry	 95 	 Very limited Depth to saturated zone Restricted permeability Ponding Leaching limitation	 1.00 1.00 1.00 1.00 0.50	 Very limited Depth to saturated zone Restricted permeability Ponding	 1.00 1.00 1.00	 Very limited Depth to saturated zone Restricted permeability Ponding	 1.00 1.00 1.00

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Map symbol and soil name	Pct. of map unit	manure and food processing was	_	Application of sewage sludg	e	Disposal of wastewater by irrigation	n
				Rating class and limiting features			Value
133: Colo	 - 95 	Depth to saturated zone Leaching limitation	1.00 	saturated zone Flooding			 1.00 0.60
133+: Colo	 - 90 	Depth to saturated zone Leaching limitation	1.00 	saturated zone Flooding	11.00	 Very limited Depth to saturated zone Flooding 	11.00
133B: Colo	 - 90 	Depth to saturated zone	11.00	 Very limited Depth to saturated zone Flooding 	11.00		11.00
163E: Fayette	 - 90 	•		 Very limited Slope 		 Very limited Too steep for surface	1 1.00
	 	 Too acid 	 0.02 	 Too acid 	 0.07 	application Too steep for sprinkler application Too acid	 1.00 0.07
163E2: Fayette	 - 90 	Slope 	 1.00 1 0.02 1		1.00 		11.00
163F: Fayette	 - 90	 Verv limited	 	 Very limited	 	 Very limited	

Keokuk County, Iowa

and soil name	Pct. of map unit	manure and food processing was	-	Application of sewage sludg	e	Disposal of wastewater by irrigation	n
	 	 Rating class and limiting features 		Rating class and limiting features			Value
		 Slope 	11.00		11.00	surface	11.00
	 	 Too acid 	 0.02 	 Too acid 	0.07	application Too steep for sprinkler application Too acid	11.00
179D2:		 	1	 		 	l
Gara	90 		0.63	Somewhat limited Slope 	0.63	 Very limited Too steep for surface application	11.00
	 	Restricted permeability	0.41	Restricted permeability	0.31	· • •	0.77
179E: Gara	 95 	 Very limited Slope	 1.00	 Very limited Slope 	11.00	 Very limited Too steep for surface application	11.00
	 	 Restricted permeability 	 0.41 	Restricted permeability 	0.31	· • •	11.00
179E2:	1	 		 	1	 	
Gara	90 	 Very limited Slope 	11.00	 Very limited Slope 	11.00	 Very limited Too steep for surface application	11.00
	 	Restricted permeability 	0.41	Restricted permeability I I	0.31	= =	1.00
179F2: Gara	 95 	 Very limited Slope 	 1.00 	 Very limited Slope 		 Very limited Too steep for surface application	 1.00

Keokuk County, Iowa

Map symbol and soil name	Pct. of map unit	manure and food- processing was	-	Application of sewage sludg 	е	Disposal of wastewater by irrigation	ı
				Rating class and limiting features			
	 	Restricted permeability	0.41 0.41 	Restricted permeability	0.31	Too steep for sprinkler application Restricted permeability	1.00 0.31
180:	i	 	i I	1	i	i I	i
Keomah	95 	Depth to Saturated zone Restricted permeability	1.00 0.74	 Very limited Depth to saturated zone Restricted permeability Too acid	1.00 0.60	Very limited Depth to saturated zone Restricted permeability Too acid	 1.00 0.60 0.31
220: Nodaway	 90			 Very limited Flooding		 Somewhat limited Flooding	10.60
Other	 5 	saturated zone	1.00 	 Very limited Depth to saturated zone Flooding 	1.00 	 Very limited Depth to saturated zone Too steep for surface application	11.00
222C:	i	 	i I	1	i	i I	i
Clarinda	90 	Restricted permeability Depth to saturated zone Runoff limitation	1.00 1.00 0.40	saturated zone	1.00 1.00	permeability	 1.00 1.00 0.91
222C2:	 	Too acid 	0.02 	 	 	Too acid Too steep for sprinkler application 	0.07 0.02
Clarinda	90 	permeability	1.00 1.00	permeability	 1.00 1.00 0.07	permeability Depth to saturated zone	 1.00 1.00 0.91

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Map symbol and soil name	Pct. of map unit	manure and food- processing waste		Application of sewage sludg 	re	Disposal of wastewater by irrigation 	
				Rating class and limiting features			Value
	 	 Too acid 	 0.02 	 		Too acid Too steep for sprinkler application	 0.07 0.02
223C2: Rinda	 90 	permeability	1.00 1.00	saturated zone	1.00	permeability	 1.00 1.00 0.91 0.02
273C: Olmitz	 - 95 	 Not limited - - - - - -	 	 Not limited 		Somewhat limited Too steep for surface application Too steep for sprinkler application	 0.91 0.02
279: Taintor	 - 95 	Depth to saturated zone Leaching limitation	1.00	permeability	1.00	saturated zone	1.00
280: Mahaska	 - 95 	Depth to saturated zone	11.00		11.00	 Very limited Depth to saturated zone Too acid 	 1.00 0.07
280B: Mahaska	 - 90 	. 4	11.00	 Very limited Depth to saturated zone	1.00	 Very limited Depth to saturated zone	 1.00

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Map symbol and soil name	Pct. of map unit	manure and food processing was	-	Application Of sewage sludg	е	Disposal of wastewater by irrigation 	1
	i 	Rating class and limiting features		Rating class and limiting features		Rating class and limiting features	Value
		 Too acid 	 0.02 	 Too acid 	 0.07 	 Too steep for surface application Too acid	 0.08 0.07
281B: Otley	 90 	 Somewhat limited Depth to saturated zone Too acid 	 0.46 0.02 	saturated zone	 0.46 0.07 	saturated zone	 0.46 0.08 0.07
281B2: Otley	 90 	saturated zone	 0.46 0.02 	saturated zone	 0.46 0.07 	 Somewhat limited Depth to saturated zone	 0.46 0.08
281C: Otley	 95 1 1 1 1 1	 Somewhat limited Depth to saturated zone Too acid 	 	saturated zone	 	 Somewhat limited Too steep for surface application Depth to saturated zone	 0.91 0.46 0.07 0.02
281C2: Otley	90 91 92 93 94 95 95 95 95 95 95 95	saturated zone 	 0.46 0.02 0.02	saturated zone	 0.46 0.07 1	surface application	 0.91 0.46 0.07 0.02

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Map symbol and soil name	Pct. Application of of manure and food- map processing waste unit		Application of sewage sludg 	е	Disposal of wastewater by irrigatior 	1	
	 	Rating class and limiting features		Rating class and limiting features		Rating class and limiting features	
281D2: Otley	 90 	 Somewhat limited Slope 	 0.63	 Somewhat limited Slope 	 0.63 	 Very limited Too steep for surface application	 1.00
	 	Depth to saturated zone	0.46	Depth to saturated zone	0.46	= =	0.77
	 	Too acid 	0.02	Too acid	0.07	= =	0.46 0.07
293C: Chelsea	 57 	 Very limited Filtering capacity Leaching limitation 	 1.00 0.45 	capacity	 1.00 1.00 		 1.00 0.91 0.02
Fayette	 38 		 0.02 	 Somewhat limited Too acid 	 0.07 		 0.91 0.07 0.02
293D: Chelsea	57 	 Very limited Filtering capacity Slope Leaching limitation		i I	 1.00 0.63 	capacity	 1.00 1.00 0.77
Fayette	 38 	 Somewhat limited Slope 	 0.63 	 Somewhat limited Slope 	 0.63 	 Very limited	11.00

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Map symbol and soil name	Pct. of map unit	manure and food processing was	_	Application of sewage sludg 	_		1
	 	Rating class and limiting features		Rating class and limiting features		Rating class and limiting features	
		Too acid	 0.02 	 Too acid 	 0.07 	Too steep for sprinkler application Too acid	 0.77 0.07
293E: Chelsea	 57 			 Very limited Filtering		 Very limited Filtering	 1.00
	 	capacity Slope 	11.00	capacity Slope 	11.00	surface	11.00
	 	 Leaching limitation 	0.45	 	 	application Too steep for sprinkler application	11.00
Fayette	38	· <u>-</u>	11.00	 Very limited Slope 	11.00	 Very limited Too steep for surface application	11.00
	 	 Too acid 	 0.02 	 Too acid 	 0.07 	= =	11.00
293F:		 				 	
Chelsea	57 	-		Very limited Filtering capacity	 1.00 	Very limited Filtering capacity	 1.00
	 	Filtering capacity 	1.00 	Slope 	1.00 	Too steep for surface application	11.00
	 	Leaching limitation 	0.45			Too steep for sprinkler application	1.00
Fayette	38		11.00	 Very limited Slope 	11.00	surface	11.00
	 	 Too acid 	 0.02 	 Too acid 	 0.07 	Too steep for sprinkler application	 1.00
		 		 		Too acid 	0.07
294C: Billett	65	 Somewhat limited		 Somewhat limited		 Somewhat limited	

Keokuk County, Iowa

Map symbol and soil name	Pct. of map unit	manure and food processing was	_	Application of sewage sludg 	е	Disposal of wastewater by irrigatior 	n
	 	Rating class and limiting features		Rating class and limiting features		Rating class and limiting features	Value
	 	 Filtering capacity 	0.01	 Filtering capacity 	0.01	 Too steep for surface application	 0.91
	 	 	 	 		Too steep for sprinkler application	0.02
	 	 	 	 		Filtering capacity 	0.01
Ladoga	35 	 Somewhat limited Restricted permeability 	0.41	Somewhat limited Restricted permeability	0.31	 Somewhat limited Too steep for surface application	 0.91
		Filtering capacity	0.01	Filtering capacity	0.01		0.31 0.02
	 	 	 	 	 	sprinkler application Filtering	1 1 1 1 0 . 01
294D:	 	 	 	 	 	capacity	i
Billett	65 	 Somewhat limited Slope 	0.63	Somewhat limited Slope 	0.63	 Very limited Too steep for surface application	11.00
		 Filtering capacity 	0.01	Filtering capacity 	0.01	Too steep for sprinkler application	0.77
		 	 	 		Filtering capacity 	0.01
Ladoga	35 	Somewhat limited Slope 	 0.63 	Somewhat limited Slope 	 0.63 	Very limited Too steep for surface application	 1.00
	 	Restricted permeability 	0.41	Restricted permeability	0.31 	Too steep for sprinkler application	0.77
	 	Filtering capacity 	0.01	Filtering capacity	0.01		0.31
313F2:		 - -	 	 		capacity	
Gosport	95	 Very limited Slope	11.00	Very limited Restricted permeability	11.00	 Very limited Restricted permeability	11.00

Keokuk County, Iowa

and soil name	Pct. of map unit	manure and food processing was	_	Application of sewage sludg		Disposal of wastewater by irrigation 	
	 			Rating class and limiting features			
	 	Restricted	11.00	 Slope 		Too steep for surface application	11.00
		Droughty 	1.00	Droughty 		Too steep for sprinkler application	11.00
	 	saturated zone	İ			Droughty 	11.00
	 	Depth to bedrock 	0.42 	Depth to bedrock	0.42	Depth to saturated zone	0.46
319E: Dunbarton 422: Amana		Depth to bedrock Low adsorption Droughty Restricted permeability Slope	1.00 1.00 1.00 1.00 1.00 1.00	Depth to bedrock Low adsorption Restricted permeability Slope	1.00 1.00 1.00 1.00 1.00 1.00	Low adsorption Too steep for surface application Too steep for sprinkler application sprinkler sprinkler	 1.00 1.00 1.00 1.00 1.00 1.00
	 	saturated zone	İ	Flooding Depth to saturated zone	•	saturated zone	
423D2: Bucknell	 90 	•		 Very limited Restricted permeability 		 Very limited Too steep for surface application	11.00
	 	saturated zone	İ	Depth to saturated zone Slope	i	Depth to	1.00 1.00
	 	 Runoff limitation 	 0.40 	 Too acid 	0.07	saturated zone Too steep for sprinkler	10.77
	 	 Too acid 	 0.02 	 	 	application Too acid 	 0.07
424D: Lindley	 52	 Somewhat limited	 	 Somewhat limited	 	 Very limited	

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and soil name	Pct. of map unit	manure and food processing was	_	Application of sewage sludg	е	Disposal of wastewater by irrigation	1
	 	Rating class and limiting features		Rating class and limiting features		Rating class and limiting features	
		 Slope 	0.63	 Slope 	10.63	 Too steep for surface application	11.00
	 	Restricted permeability	0.41	Too acid	0.31	= =	0.77
	 	 Too acid 	0.08	Restricted permeability	0.31	= =	0.31
	 	 - -		 		Restricted permeability	0.31
Keswick	43	 Very limited	İ	Very limited	İ	Very limited	i
		Restricted permeability	11.00		11.00	=	11.00
	i I	Depth to saturated zone	11.00	Depth to saturated zone	11.00	Restricted permeability	11.00
		Slope 	0.63 	Slope 	0.63 	Depth to saturated zone	1.00
		Too acid 	0.08 	Too acid 	0.31 	Too steep for sprinkler application	0.77
	 	 - -		 	 	Too acid 	0.31
424D2: Lindley	I I 52	 Somewhat limited	1	 Somewhat limited	1	 Very limited	1
<u>.</u>		Slope 	0.63		0.63	=	1.00
	 	Restricted permeability	0.41	Too acid	0.31		0.77
		Too acid 	0.08 	Restricted permeability	0.31 	İ	0.31
		 		 		Restricted permeability	0.31
Keswick	43	 Very limited		 Very limited		 Very limited	i
		Restricted permeability 	1.00 	Restricted permeability 	1.00 	Too steep for surface application	1.00
	į	Depth to	11.00		1.00	Restricted	11.00
	 	saturated zone Slope 	 0.63 	saturated zone Slope 	 0.63 	permeability Depth to saturated zone	11.00
	 -	Too acid 	0.08	Too acid 	0.31	Too steep for sprinkler application	0.77

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Map symbol and soil name	Pct. of map unit	manure and food processing was	_	Application of sewage sludg 	е	Disposal of wastewater by irrigation 	ı
	i 	Rating class and limiting features		Rating class and limiting features		Rating class and limiting features	
	 	 	 	 	 	 Too acid 	 0.31
424E2: Lindley	 48 	 Very limited Slope		 Very limited Slope		 Very limited Too steep for surface	 1.00
	 	 Restricted permeability	0.41	 Too acid 	0.31	application Too steep for sprinkler	11.00
	 	 Too acid 	 0.08 	 Restricted permeability	 0.31 	application Too acid 	 0.31
	 	 - -		 		Restricted permeability	0.31
Keswick	42 	Very limited Restricted permeability	11.00	Very limited Low adsorption 	11.00	 Very limited Too steep for surface application	11.00
		 Slope 	11.00	Restricted permeability	11.00	= =	11.00
	i I	Depth to saturated zone	11.00	İ	11.00	Restricted permeability	11.00
	 	Too acid 	0.56 	saturated zone	1.00 1.00	saturated zone	1.00 1.00
425D: Keswick	 90	 Very limited		 Very limited		 Very limited	
	 	Restricted permeability	1.00	-	1.00	-	11.00
	 	Depth to saturated zone Slope	1.00 0.63	saturated zone	1.00 0.63	permeability Depth to	1.00 1.00
	 	 Too acid 	 0.08 	 Too acid 	 0.31 	saturated zone Too steep for sprinkler application	 0.77
425D2:	 	 		 		Too acid 	0.31
Keswick	90 	 Very limited Restricted permeability 	11.00	 Very limited Restricted permeability 	11.00	 Very limited Too steep for surface application	11.00

Keokuk County, Iowa

1 1	Pct. of map unit	manure and food- processing waste		Application of sewage sludg 		Disposal of wastewater by irrigation	1
	 	 Rating class and limiting features 				Rating class and limiting features	Value
	 	 Depth to saturated zone Slope	11.00	saturated zone	 1.00 0.63	permeability	1.00 1.00
	 	 Too acid 	10.08	 Too acid 	0.31	saturated zone Too steep for sprinkler application	 0.77
428B: Ely	 95 	 Very limited Depth to saturated zone 	 1.00 	 Very limited Depth to saturated zone 	 1.00 	Too acid Very limited Depth to saturated zone Too steep for surface application	0.31 1.00 0.08
430: Ackmore	90 90 	 Somewhat limited Depth to saturated zone Flooding		 Very limited Flooding Depth to saturated zone	1.00	saturated zone	 0.95 0.60
453: Tuskeego	 95 	Restricted permeability Depth to saturated zone Flooding Leaching limitation	11.00	Too acid	11.00	Depth to saturated zone Flooding	 1.00 1.00 1.00 0.60 0.07
520: Coppock	 95 	 Very limited Depth to saturated zone Flooding	11.00	 Very limited Depth to saturated zone Flooding		 Very limited Depth to saturated zone Flooding	1 1.00
520B: Coppock	 95 	Depth to	11.00	 Very limited Depth to saturated zone	11.00	 Very limited Depth to saturated zone	 1.00

Keokuk County, Iowa

Map symbol and soil name	Pct. of map unit	manure and food processing was	-	Application of sewage sludg	е	Disposal of wastewater by irrigation	1
	 	Rating class and limiting features		Rating class and limiting features		Rating class and limiting features	Value
	 	 	 	 Flooding 	10.40	Too steep for surface application	 0.08
570C: Nira	 95 	 Somewhat limited Depth to saturated zone 	 0.46 	 Somewhat limited Depth to saturated zone 	 0.46 		 0.91 0.46 0.02
570C2: Nira	 - 95 	 Somewhat limited Depth to saturated zone 	 0.46 	 Somewhat limited Depth to saturated zone 	 0.46 		 0.91 0.46 0.02
571c2: Hedrick	 - 89 	permeability		 Very limited Restricted permeability Depth to saturated zone 	 1.00 0.46 	permeability	 1.00 0.91 0.46 0.02
571D2: Hedrick	 - 90 	 Very limited Restricted permeability 	 1.00 	 Very limited Restricted permeability 	 1.00 	 Very limited Too steep for surface application	1 1.00
	 	 Slope 	0.63	Slope 	0.63	Restricted permeability	11.00

Keokuk County, Iowa

Map symbol and soil name	Pct. of map unit	manure and food processing was	_	Application of sewage sludg 	е	Disposal of wastewater by irrigation 	n
	 			Rating class and limiting features		•	
	 	 Depth to saturated zone 	0.46	Depth to saturated zone 	0.46	Too steep for sprinkler application Depth to saturated zone	 0.77 0.46
572C2:		 		 	1	 	
Inton	90	=	1.00	Very limited Restricted permeability Depth to saturated zone	1.00 	Very limited Restricted permeability Too steep for surface application Depth to saturated zone Too steep for sprinkler application	 1.00 0.91 0.46 0.02
572D2:		177 1 / /	į	177	į	177	į
Inton	 	Restricted permeability		Very limited Restricted permeability	11.00	Very limited Too steep for surface application	11.00
		Slope	0.63	Slope	0.63	Restricted	11.00
	 	 Depth to saturated zone 	0.46	 Depth to saturated zone 	 0.46 	permeability Too steep for sprinkler application Depth to saturated zone	 0.77 0.46
587: Chequest	1 00	 	1	 Very limited		 Very limited	
Chequest		Depth to saturated zone Flooding Restricted	1.00 0.60 0.41	Depth to saturated zone Flooding	1.00 1.00 0.31	Depth to saturated zone Flooding Restricted	1.00 0.60 0.31
587+:			[İ
Chequest	· 90 	Very limited Depth to saturated zone Flooding Restricted permeability	1.00 0.60 0.41	saturated zone	 1.00 1.00 0.31	saturated zone Flooding Restricted	 1.00 0.60 0.31

Keokuk County, Iowa

Map symbol and soil name	Pct. of map unit 	manure and food processing was	_	Application of sewage sludge 		Disposal of wastewater by irrigation 	
	 			Rating class and limiting features			
		 Too acid 	10.02	Too acid	 0.07	Too acid	 0.07
687B: Watkins	 90 	 Not limited 	 	 Not limited 	 	 Somewhat limited Too steep for surface application 	 0.08
688: Koszta	 90 	Depth to saturated zone	11.00	Depth to saturated zone	11.00	· ±	 1.00 0.07
722: Nodaway	 - 36	 Somewhat limited Flooding				 Somewhat limited Flooding	10.60
Ackmore	 - 32 	Depth to saturated zone	0.95 	Flooding 	11.00	saturated zone	 0.95 0.60
Vesser	 - 22 	Depth to saturated zone	1.00 	Depth to saturated zone	1.00 	saturated zone	 1.00 0.60
730B: Nodaway	 - 46 					 Somewhat limited Flooding	 0.60
Coppock	 - 27 			saturated zone Flooding 	0.95 0.40	saturated zone Too steep for surface	 0.95 0.08
Cantril	 	 Somewhat limited Depth to saturated zone Too acid 	 0.95 0.02	saturated zone	 0.95 0.40	saturated zone Too steep for surface	 0.95 0.08
		 		 Too acid	10.07	application Too acid	10.07

Keokuk County, Iowa

Map symbol and soil name	of map	Pct. Application of of manure and food- map processing waste unit		Application of sewage sludg	e	Disposal of wastewater by irrigation 	1
	 	Rating class and limiting features		Rating class and limiting features		Rating class and limiting features	Value
779: Kalona	 95 	 Very limited Depth to saturated zone Restricted permeability	1 1.00	saturated zone	1 1.00 1 10.31	 Very limited Depth to saturated zone Restricted permeability	1.00
792C2: Armstrong	 90 	Restricted permeability	1.00	permeability	 1.00 1.00 1.00 		 1.00 1.00 0.91 0.02
792D2: Armstrong	 95 	permeability Depth to saturated zone	 	permeability Depth to saturated zone	 1.00 1.00 1.00 10.63	surface application Restricted permeability	 1 1.00 1 1.00 1.00 1.00 1.07
795C2: Ashgrove	 95 	Restricted permeability	1.00 1.00 	permeability Depth to saturated zone		permeability Depth to saturated zone	

Keokuk County, Iowa

and soil name	Pct. of map unit	manure and food- processing wast		Application of sewage sludg	Application of sewage sludge 		1
	 	Rating class and limiting features	Value 	Rating class and limiting features		Rating class and limiting features	Value
795D2: Ashgrove	 82	 Very limited	 	 Very limited		 Very limited	
		Restricted permeability Depth to	1.00 1.00	permeability	1.00 1.00	Restricted permeability Depth to	1.00 1.00
	 	saturated zone Slope	1.00 0.63	saturated zone	10.63	saturated zone	11.00
	i I	 	 	I I		surface application	
		Runoff limitation	0.40	Too acid 	0.31	Too steep for sprinkler	0.77
	 	 Too acid 	 0.08 	 	 	application Too acid 	0.31
822D2: Lamoni	90	 Very limited	 	 Very limited	 	 Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	surface	11.00
	 	 Depth to saturated zone	 1.00 	Depth to saturated zone	11.00	application Restricted permeability	11.00
	i I	•	0.63		0.63 		11.00
	 	Too acid 	0.02 	Too acid 	0.07 	Too steep for sprinkler application	0.77
876B:		 	 	 	 	Too acid 	10.07
Ladoga	90 	 Somewhat limited Restricted	0.41	Somewhat limited Restricted	0.31	 Somewhat limited Restricted	0.31
	 	permeability 	 	permeability 	 	permeability Too steep for surface application	 0.08
876C2: Ladoga	90	, Somewhat limited	 	 Somewhat limited	 	 Somewhat limited	
	 	Restricted permeability 	0.41 	Restricted permeability 	0.31 	Too steep for surface application	0.91
	 	 	 		 	Restricted permeability	0.31
	 	 	 	 	 	Too steep for sprinkler application	0.02

Keokuk County, Iowa

and soil name	Pct. of map unit	manure and food processing was	_	Application Of sewage sludg	Application of sewage sludge 		1
	 	Rating class and limiting features		Rating class and limiting features		_	
876D2: Ladoga	90	,		 	 0.63	 	1 1.00
		Restricted permeability	0.41	Restricted permeability	0.31		0.77
880B: Clinton	 95 	 Somewhat limited Restricted permeability Too acid 	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	permeability	0.31	 Somewhat limited	0.31
880C2: Clinton	 95 	 Somewhat limited Restricted permeability 		 Somewhat limited Restricted permeability	 0.31 	 Somewhat limited Too steep for surface application	 0.91
	 	Too acid 	0.02 	Too acid 	0.07 	Restricted permeability Too acid Too steep for sprinkler application	0.31 0.07 0.02
880D2: Clinton	 95 	 Somewhat limited Slope 	 0.63 	 Somewhat limited Slope 	 0.63 	 Very limited Too steep for surface application	1 1.00
	 	Restricted permeability 		Restricted permeability	0.31		0.77
	 	Too acid 	0.02	Too acid 	0.07 		0.31 0.07
881B: Otley	 95 	 Somewhat limited Depth to saturated zone	 0.46	 Somewhat limited Depth to saturated zone	 0.46	 Somewhat limited Depth to saturated zone	 0.46

Keokuk County, Iowa

and soil name	Pct. of map unit	manure and food processing was	Application of sewage sludge 		Disposal of wastewater by irrigation 		
	 	Rating class and limiting features 		Rating class and limiting features		Rating class and limiting features 	Value
		 Too acid 	 0.02 	 Too acid 	 0.07 	Too steep for surface application Too acid	 0.08 0.07
911B: Colo	 57 	saturated zone		 Very limited Depth to saturated zone Flooding 	 1.00 1.00 	saturated zone	 1.00 0.60 0.01
Ely	38	Somewhat limited Depth to saturated zone 	 0.95 	 Depth to saturated zone 	0.95	Somewhat limited Depth to saturated zone Too steep for surface application	0.95
993D2: Gara	48	 Somewhat limited Slope 	0.63	 Somewhat limited Slope 	0.63	surface	11.00
	 	 Restricted permeability 	 0.41 	 Restricted permeability 	0.31	application Too steep for sprinkler application Restricted permeability	 0.77 0.31
Armstrong	 42 	. =		 Very limited Restricted permeability	11.00	 Very limited	11.00
	 	saturated zone	1.00	saturated zone	1.00	Restricted permeability	1.00 1.00 0.77
993E2:		 Very limited		 Very limited		 Very limited	

Keokuk County, Iowa

	Pct. of map unit	of manure and food- ap processing waste		Application of sewage sludg 	Disposal of wastewater by irrigation 		
		Rating class and limiting features		Rating class and limiting features		Rating class and limiting features	
	 	 Slope 	 1.00 	 Slope 	11.00	 Too steep for surface application	11.00
		Restricted permeability	0.41	Restricted permeability	0.31 	Too steep for sprinkler application	11.00
	 	 	 	 		Restricted permeability	0.31
Armstrong	- 42 	•		 Very limited Restricted permeability 	11.00	 Very limited Too steep for surface application	11.00
	 	Slope 	1.00 	Slope 	11.00	= =	11.00
		Depth to saturated zone 	1.00 	Depth to saturated zone 	1.00 	Restricted permeability Depth to saturated zone	1.00 1.00
994D2:	 	 	 	 		saturated zone 	
Galland	- 65 		 1.00 	Very limited Restricted permeability	11.00	Very limited Too steep for surface application	11.00
	į Į	saturated zone	1.00	saturated zone	11.00	Restricted permeability	11.00
		Slope Runoff limitation	0.63 0.40	Slope 	0.63 	Depth to saturated zone Too steep for	1.00 0.77
				 		sprinkler application	
Douds	- 25 	 Somewhat limited Slope 	 0.63 	 Somewhat limited Slope 	0.63	 Very limited Too steep for surface application	11.00
		 Too acid 	 0.02 	 Too acid 	0.07	Too steep for sprinkler application	0.77
994E2:	 	 	 	 	 	Too acid 	0.07
Galland	- 55 	Very limited Restricted permeability	 1.00	Very limited Restricted permeability	11.00	Very limited Too steep for surface	11.00

Keokuk County, Iowa

Map symbol and soil name	Pct. of map unit	manure and food processing was	manure and food- processing waste		Application of sewage sludge 		l
	 	 Rating class and limiting features 		Rating class and limiting features		Rating class and limiting features	Value
		 Slope 	11.00	 Slope 	11.00	Too steep for sprinkler application	11.00
	 	Depth to saturated zone Runoff limitation	1.00	Depth to saturated zone 	11.00	Restricted permeability Depth to saturated zone	11.00
Douds	 35 	· •	 1.00	 Very limited Slope 	1 1.00	 Very limited	11.00
	 	 Too acid 	 0.02 	 Too acid 	 0.07 	application Too steep for sprinkler application Too acid	 1.00 0.07
99F: Nordness	 62 	Slope Restricted permeability Depth to bedrock	1.00 1.00 	Restricted permeability Depth to bedrock	1.00 1.00 	Restricted permeability Depth to bedrock	 1.00 1.00 1.00 1.00
Eleva	23 	 Very limited Slope 	 1.00 	 Very limited Slope 	1 1.00	 Very limited Too steep for surface application	1 1.00
	 	Droughty	1.00	Droughty	11.00	= =	11.00
	 	limitation	0.45	İ	0.77	Droughty	11.00
	 	_		Depth to bedrock Filtering capacity 	0.42 0.01 		0.77 0.42
999G: Nordness	 62 	_	1.00 1.00	 Very limited Droughty Restricted permeability	1.00 1.00		 1.00 1.00

Keokuk County, Iowa

and soil name	Pct. of map unit	f manure and food- processing waste		Application of sewage sludge 		Disposal of wastewater by irrigation	
	 	 Rating class and limiting features 		Rating class and limiting features		 Rating class and limiting features 	
	 	Depth to bedrock Droughty I	1.00 1.00 1.00 	_	1.00 1.00 1.00 	Too steep for surface application	 1.00 1.00 1.00
Eleva	23	-	11.00	 Very limited Slope 	11.00	 Very limited Too steep for surface application	11.00
		Droughty 	1.00	Droughty	1.00		11.00
	į	 Leaching limitation	0.45	Too acid	0.77		1.00
		Depth to bedrock	0.42	· •	0.42		0.77
1075: Givin	 90 	Depth to saturated zone	1.00 	 Very limited Depth to saturated zone Restricted permeability	1.00 	saturated zone	11.00
1220: Nodaway	 90 	•		 Very limited Flooding	1 1.00	 Very limited Flooding	1 1.00
1279: Taintor	 95 	Depth to saturated zone Leaching limitation	1.00 0.50	 Very limited Depth to saturated zone Restricted permeability 	1.00 0.31	saturated zone Restricted permeability	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1280: Mahaska	 95 	 Very limited Depth to saturated zone Too acid	 1.00 0.02	saturated zone	 1.00 0.07	 Very limited Depth to saturated zone Too acid	11.00

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and soil name	Pct. of map unit	manure and food processing was	_	Application of sewage sludge 		Disposal of wastewater by irrigation	
				Rating class and limiting features			
1315: Nodaway	 57					 Very limited Flooding	 1.00
Klum		Flooding	1.00 0.01	Flooding	1.00 0.01	 Very limited Flooding Filtering capacity	 1.00 0.01
5010: Pits, Sand And Gravel		 Not rated 	 	 Not rated 	 	 Not rated 	
5020: Pits And Dumps	 100 	 Not rated 	 	 Not rated 	 	 Not rated 	
5030: Pits, Limestone Quarries		 Not rated 	 	 Not rated 	 	 Not rated 	
5040: Orthents	 100 	 Not rated 	 	 Not rated 	 	 Not rated 	
5048: Aquents, Ponded, Frequently Flooded-	 100 	 Not rated 	 	 Not rated 	 	 Not rated 	

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and soil name	Pct. of map unit	manure and food processing was	_		Application of sewage sludge 		n
	 			Rating class and limiting features			
5060: Pits, Clay	 100 	 - - Not rated - -	 	 		 - - Not rated - -	
5080: Orthents, Sanitary Landfill		 Not rated 	 	 Not rated 	 	 Not rated 	
6051: Vesser	 95 	Depth to saturated zone	1.00 	saturated zone	1.00 	 - Very limited Depth to saturated zone Flooding	 1.00 1.00
6054: Zook	 95 	saturated zone Flooding Restricted permeability	1.00 1.00 1.00	Flooding Restricted permeability	1.00 1.00	 Very limited Depth to saturated zone Flooding Restricted permeability	 1.00 1.00 1.00
6133: Colo	 90 	saturated zone Flooding	1.00	saturated zone Flooding	11.00	 Very limited Depth to saturated zone Flooding	 1.00 1.00
6133+: Colo	 90 	 Very limited Depth to saturated zone Flooding Leaching limitation	 1.00 1.00 0.70	saturated zone Flooding	 1.00 1.00	saturated zone	1 1.00 1 1.00

Keokuk County, Iowa

and soil name	 Pct. of map unit	manure and food- processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
	 			Rating class and limiting features			Value
6220: Nodaway	 90 			. 4		 Very limited Flooding	1 1.00
6315: Nodaway						 Very limited Flooding	1 1.00
Klum	 38 	Flooding Filtering	11.00	Filtering	11.00	 Very limited Flooding Filtering capacity	 1.00 0.01
6422: Amana	 89 	Flooding	11.00	Depth to	1.00 0.95	 Very limited Flooding Depth to saturated zone	 1.00 0.95
6587: Chequest		Depth to saturated zone Flooding Restricted permeability	1.00 1.00 0.41	Depth to saturated zone Flooding Restricted permeability	1.00 1.00 0.31	Flooding Restricted	 1.00 1.00 0.31 0.07
AW: Animal Waste	 	 Not rated 		 Not rated 	 	 Not rated 	
SL: Sewage Lagoon	 1 100 	 Not rated 		 Not rated 	 	 Not rated 	
W: Water	 100 	 Not rated 	 	 Not rated 	 	 Not rated 	